



Maine and New Hampshire Area Contingency Plan

PLANNING

SECTION	TITLE	PAGE NO.
4000	PLANNING.....	4000-2
4100	PLANNING SECTION ORGANIZATION.....	4000-2
4110	<i>Planning Section Planning Cycle Guide</i>	4000-3
4200	ROLES AND RESPONSIBILITIES	4000-3
4210	<i>Planning Section Chief</i>	4000-3
4220	<i>Situation Unit</i>	4000-4
4230	<i>Resource Unit</i>	4000-4
4240	<i>Technical Specialist</i>	4000-4
4250	<i>Documentation Unit</i>	4000-4
4260	<i>Demobilization Unit</i>	4000-5
4270	<i>Science & Environmental Unit</i>	4000-5
4271	Wildlife Unit	4000-6
4300	COMPLIANCE GUIDANCE	4000-6
4310	<i>Statutory Guidance</i>	4000-6
4311	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)	4000-6
4312	Federal Water Pollution Control Act as amended by Clean Water Act & OPA 90	4000-6
4313	National Historic Preservation Act (NHPA).....	4000-7
4314	Endangered Species Act (ESA)	4000-7
4315	Resource Conservation and Recovery Act (RCRA)	4000-7
4316	National Environmental Policy Act (NEPA).....	4000-7
4400	ENVIRONMENTAL SENSITIVITY , MAPS & INFORMATION – GEOGRAPHIC RESPONSE PLANS	4000-7
4500	STRATEGIC RESPONSE PRIORITIES	4000-8
4510	<i>General Hierarchy of Strategic Planning Priorities</i>	4000-8
4600	STRATEGIC RESPONSE OPTIONS	4000-8
4610	<i>Protection, Containment, and Recovery Strategies</i>	4000-8
4620	<i>Chemical Countermeasures</i>	4000-8
4621	Dispersants.....	4000-9
4622	Habitat Considerations	4000-9
4623	Dispersant Types.....	4000-10
4624	Dispersant Selection.....	4000-10
4625	Application Method Selection	4000-11
4626	Making The Dispersant Use Decision.....	4000-11
4627	Guidelines for Dispersant Use Decision Making	4000-12
4628	Preauthorization For Dispersant Use	4000-14
4629	Dispersant Resources	4000-18
4630	<i>Disposal Strategies</i>	4000-21
4631	NEW HAMPSHIRE	4000-21
4632	MAINE	4000-22
4640	<i>In-Situ Burning</i>	4000-22
4641	Preauthorization Agreement for In-Situ Burning	4000-23
4650	<i>Bioremediation</i>	4000-23
4660	<i>Decanting</i>	4000-23
4661	Policy	4000-24
4662	Criteria	4000-24
4663	Oil Spill Decanting Authorization Form	4000-25
4700	RESERVED FOR AREA	4000-25
ENCLOSURE: MEMORANDUM OF UNDERSTANDING ON IN-SITU BURNING		4000-28



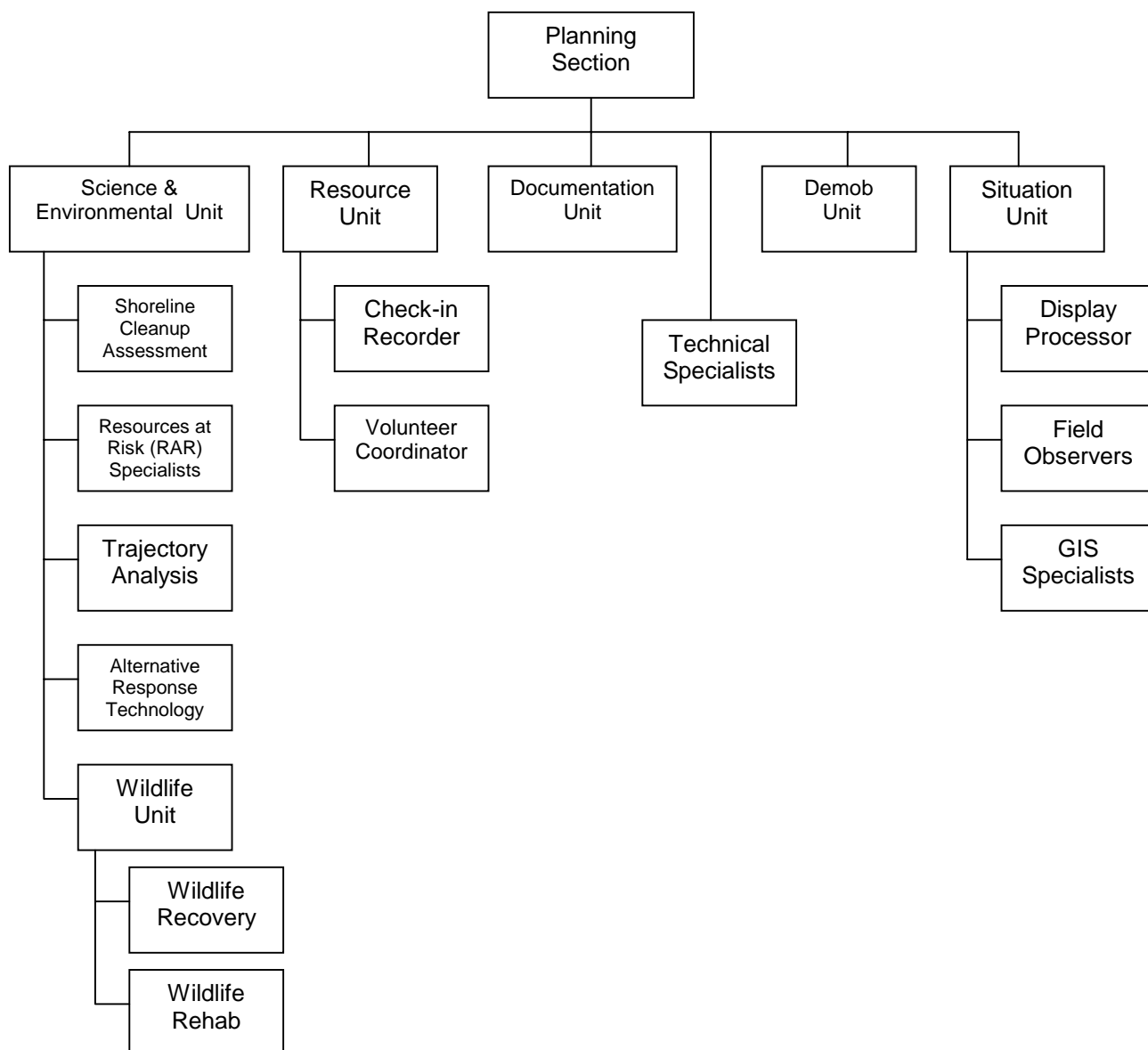
4000 PLANNING

Planning is responsible for the collection, evaluation and dissemination of tactical information related to the incident, and for the preparation and documentation of Action Plans. The section also maintains information on the current and forecasted situation, and on the status of resources assigned to the incident. Includes the Situation, Resource, Documentation, Environmental, and Demobilization Units, as well as Technical Specialists.

4100 PLANNING SECTION ORGANIZATION

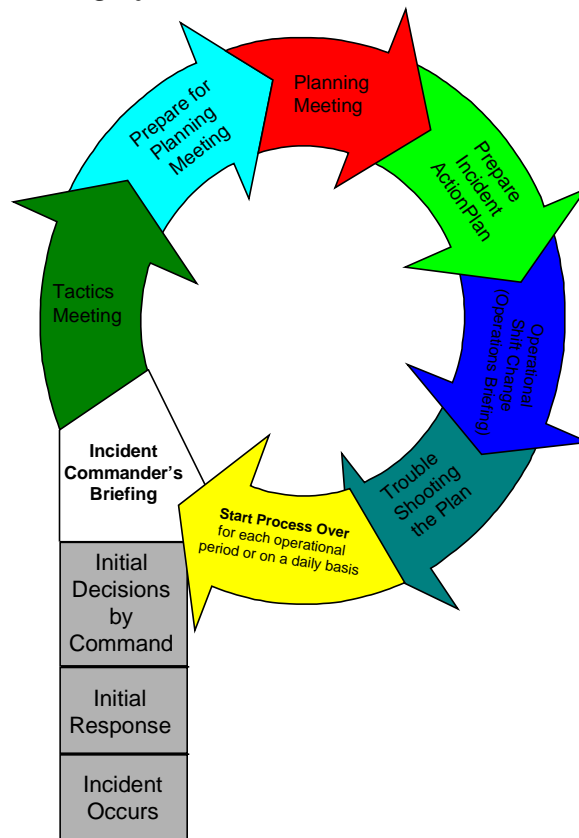
The following is an organizational chart of the planning section and its subordinate units. It serves as an example and is not meant to be all inclusive. The functions of the Planning Section must be accomplished during an incident, however, they can be preformed by one individual or can be expanded, as needed, into additional organizational units with appropriate delegation of authority.

Figure 4000-1
Planning Section Organization





4110 Planning Section Planning Cycle Guide



4200 ROLES AND RESPONSIBILITIES

The Oil Spill Field Operations Guide (FOG) ICS-OS-420-1, dated June 1996, provides additional descriptions for each section.

4210 Planning Section Chief

The Planning Section Chief, a member of the General Staff, is responsible for the collection, evaluation, dissemination and use of information about the development of the incident and status of resources. Information is needed to 1) understand the current situation 2) predict probable course of incident events; and 3) prepare alternative strategies for the incident. As a part of this overall responsibility the Planning Section Chief performs the following functions:

- Collects information regarding the incident with respect to quantity and type of oil, loss rate, projected total loss before spill is secured, weather conditions, current and projected trajectory of oil over time.
- Current and projected response resources and schedule of delivery.
- Natural, cultural and economic resources actually impacted and projected impacts based upon trajectory, and their sensitivity.
- Recommends oil spill response activity priorities.
- Potential oil spill countermeasures (skimming, booming, application of dispersants, etc.) to be recommended to the Incident Command.
- Develops an effective incident action plan based upon projected needs.
- Modifies the incident action plan to meet changing needs.



- Anticipates changing resource needs.
- Prepares alternative strategies and tactical operations based on incident potential and effectiveness of current operations (following consultation with operations chief).
- Develop units within the section to meet the needs of the spill.

4220 Situation Unit

The Situation Unit responsibilities include analysis of the situation as it progresses, through the recording and evaluation of information about the current status of the incident.

- Display incident status information obtained from field observers, resource status reports, aerial and ortho photographs and infrared data.
- Collect situation information from personnel observations at the incident.
- Provide projections and estimates of the movement and behavior of the spill.
- Information addressed by this unit should include:
 - Quantity and type of oil lost
 - Loss rate, if continuing
 - Projected total loss of oil before spill is secured
 - Quantity of oil recovered
 - Current oil location and projected trajectory over time
 - Impacts on natural resources
 - Weather and sea conditions

4230 Resource Unit

Resource Unit is responsible for recording the status of resources (primary and secondary) and volunteers committed to the incident. Major responsibilities of this Unit are recording and evaluation of:

- Current and projected response resources and schedule of delivery. This includes personnel, equipment, materials and supplies required to meet the response strategies.
- Impact that additional responding resources will have in meeting the spill response objectives and/or implementation of strategies.
- Evaluate response resource ability to meet response priorities established by Incident Command.
- Works closely with Operations to address needs and ongoing effectiveness of resources as well as with logistics to assure resource availability.
- All applicable federal and state volunteer plans must be complied with.

4240 Technical Specialist

Technical Specialist are advisors with special skills needed to support the incident. Technical Specialists may be assigned anywhere in the ICS organization. If necessary, Technical Specialists may be formed into a separate unit. The Planning Section will maintain a list of available specialists and will assign them where necessary.

4250 Documentation Unit

The Documentation Unit is responsible for the maintenance and protection of all documents relevant to the incident. Thorough documentation is critical to post-incident analysis. Some of these documents may originate in other sections. Incident files will be stored for legal, analytical, and historical purposes.

- Gather and maintain all relevant and necessary documentation associated with the oil spill.
- Legal Section may need to be consulted.
- Ensure each section maintains and provides appropriate documents.
- Provides duplication and copying services.
- Examples of incident documentation include:
 - Incident Action Plan;
 - Incident reports;
 - Communication logs;
 - Injury Claims; and



Situation Status Reports.

4260 Demobilization Unit

The Demobilization Unit is responsible for the development of a plan for the demobilization of the resources committed to an incident and assisting in the implementation of that plan. In incidents requiring a major resource commitment, an effective, safe, and cost-effective demobilization and return of resources to service is dependent on adequate planning.

4270 Science & Environmental Unit

Other than protecting human life and safety, reducing impacts to public natural and cultural resources represents the key motive in responding to an oil spill. The Science & Environmental Unit is the central point within the Planning section for determining how to best protect the resources. Specifically the Environmental Unit is responsible for:

- Identifying all sensitive public natural and cultural resources likely to be affected by the spill, and set priorities for protecting these resources.
- Guiding the implementation of Geographic Response Plans (GRPs).
- Working with the Operations Section to establish any additional environmental protection strategies not identified in the GRPs.
- Establishing Shoreline Cleanup Assessment Teams (SCAT).
- Using SCAT information to recommend shoreline cleanup recommendations, priorities, and restrictions.
- Providing guidance regarding “how clean is clean” decisions.
- Identify and recommend clean up techniques and possible use of dispersants, other chemical countermeasures, or in situ burning as a preventative measure.
- Developing a disposal plan.
- Providing information to JIC and media regarding natural resource concerns/impacts.
- Coordinating with NRDA activities.
- Identify potential type and number of wildlife and fishery resources that will require recovery and rehabilitation based upon:
 - Species
 - Sensitivity to oil
 - Mobility
- Providing the following environmental information and services:
 - Weather / Tides & Currents
 - Trajectory / Overflight Maps
 - Resources at Risk
 - Biological Assessment
 - Shoreline Assessment
 - Chemical Analysis
 - Long-term Monitoring
 - Seafood Tainting
 - Science Outreach (Universities, etc.)
 - Human Health Risk Assessment
 - Science Reference Library

Given the importance of the Environmental Unit’s duties, and because the responsibility and knowledge base for public resources lies with trustee agencies, it is the policy of the Maine and New Hampshire Area Committee that the Environmental Unit be led by either the NOAA SSC or a representative of a government natural resource trustee agency, if available. If no such agency representative is available or willing to lead the environmental unit, the UC may allow a responsible party representative to fill that role. The Environmental Unit leader or his/her designee should always attend the following ICS meetings and provide Environmental Unit information reports and updates with the Situation and Resource Unit Leaders:

- Initial ICS 201 Briefing



- Tactics Meetings
- Planning Meetings
- Operations Meetings
- Unified Command Briefings
- Press Conferences

All trustee resource agency staff with environmental information/expertise should initially report to the Environmental Unit. This includes technical specialists identified elsewhere within the ICS organization. However, it is recognized that the SSC is an advisor to the FOSC and part of the Command Staff. Other Incident Commanders may also have Environmental representatives as part of the Command Staff.

4271 Wildlife Unit

Wildlife Unit is responsible for the recovery and rehabilitation of wildlife impacted by the spill, and may include functions such as:

- Marine Mammals Recovery
- Marine Mammals Rehabilitation
- Bird Recovery
- Bird Rehabilitation

The Wildlife Unit is also responsible for the following:

- Directs wildlife recovery operations.
- Planning wildlife hazing operations under the guidance and authority of state and federal fish and wildlife agencies and in coordination with the Air Operations Branch.
- Working with the Operations Section to coordinate wildlife rescue/rehabilitation activities.
- Identify capture and care protocols based upon:
 - Species
 - Location
 - Available care facilities
 - Trustee relationships
- Provide training and briefing on actions and notifications required when response workers or members of the public encounter distressed wildlife.
- Maintains a central clearing point for all recovered wildlife.
- Maintains an evidence, tagging and storage procedure for all wildlife recovered.
- Establish wildlife rehabilitation centers and conduct rehabilitation operations.
- Maintain documentation on wildlife delivered for rehabilitation.
- Store, document and coordinate laboratory analysis and necropsies, and properly handle deceased wildlife.
- Identifies all support needs to logistics.

The Maine State Marine Oil Spill Contingency Plan is included in this Plan by reference. See Section 9 of the Maine State Plan. Additionally, the State of New Hampshire Fish and Game's Coastal Wildlife Rehabilitation Plan is included in the Plan by reference.

4300 COMPLIANCE GUIDANCE

4310 Statutory Guidance

4311 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

Enacted by congress in 1980, it is also known as the Hazardous Substance Superfund as defined by 42 USC 9601 et seq. Its purpose is to provide for liability, compensation, cleanup, and emergency response for hazardous substances released into the environment and the cleanup of inactive hazardous waste disposal sites.

4312 Federal Water Pollution Control Act as amended by Clean Water Act & OPA 90



Maine and New Hampshire Area Contingency Plan

PLANNING

As listed in 33 USC 1251 et seq., the objective of the act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. The goals of the Act include:

- The elimination of pollutants discharges into navigable waters.
- Attain water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides recreation in and around those waters.
- Prohibits the discharge of toxic pollutants.
- Provides Federal financial assistance to construct publicly owned waste treatment works.
- Requires States to provide waste treatment management plans.
- Conducts research to develop technology in order to eliminate the discharge of pollutants into navigable waters, waters of the contiguous zone, and the oceans; and
- Develop national policy for the control of non-point sources of pollution.

4313 *National Historic Preservation Act (NHPA)*

The National Historic Preservation Act of 1966 (Public Law 89-665) authorized the National Historical Register of Historic Places, expanding Federal recognition to historic properties of local and State significance. The National Park Service in the U.S. Department of the Interior administers both programs. Regulations for these programs are contained in 36 CFR Part 60, National Register of Historic Places and 36 CFR Part 65, National Historic Landmarks Program.

4314 *Endangered Species Act (ESA)*

Endanger Species Act Consultation.

Contact:

- US Fish & Wildlife Service
- NMFS

4315 *Resource Conservation and Recovery Act (RCRA)*

Also known as the Solid Waste Disposal Act, it was enacted by congress as 42 USC 6901 et seq. Congress declared it to be the national policy of the United States that, whenever feasible, the generation of hazardous waste is to be reduced or eliminated as expeditiously as possible. Waste that is nevertheless generated should be treated, stored, or disposed of so as to minimize the present and future threat to human health and the environment.

4316 *National Environmental Policy Act (NEPA)*

As defined by 42 USC 4321 et seq., the purpose of this act is:

- To declare a national policy which will encourage productive and enjoyable harmony between man and his environment;
- To promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man;
- To enrich the understanding of the ecological systems and natural resources important to the Nation;
- To establish a Council on Environmental Quality.

4400 ENVIRONMENTAL SENSITIVITY , MAPS & INFORMATION – GEOGRAPHIC RESPONSE PLANS

Geographic Response Plans covering the entire coast of Maine and New Hampshire have been developed as part of the ACP but are intended to be stand alone documents. The Geographic Response Plans provide information for determining priority areas for protective booming as well as providing information for implementing those strategies. The four GRPs for this area are:

Plan

Downeast Maine GRP
Penobscot River & Bay GRP
Casco Bay GRP
NH and Southern Maine GRP

Coverage

Washington County
Penobscot, Hancock, Knox and Waldo Counties
Cumberland, Sagadahoc and Lincoln Counties
New Hampshire and York County, Maine



4500 STRATEGIC RESPONSE PRIORITIES

4510 *General Hierarchy of Strategic Planning Priorities*

Specific strategies for response to spills in sensitive areas are detailed in the Geographic Response Plans (GRPs). General Response Priorities are:

- Protect Human Life and Health
- Minimize Ecological Impacts
- Minimize Economic and Public Impacts

4600 STRATEGIC RESPONSE OPTIONS

4610 *Protection, Containment, and Recovery Strategies*

Environmentally sensitive areas are identified in the four Geographic Response Plans (GRPs) listed in Section 4400. GRPs represent the collective input of natural resource trustee agencies and spill response organizations regarding environmental protection strategies for a given area. The objective of these plans is to reduce decision-making time during the initial hours of response to a major spill so that protection strategies can be implemented immediately. GRPs contain maps and descriptions of sensitive public and natural and cultural resources, identify strategies to protect those resources, and set priorities.

GRPs do not address Private Resources, such as commercial marinas. These resources are assigned the lowest priority for protection. Development of any protection strategies for private resources therefore falls under the duties of the responsible party.

In general, GRPs include the following types of response strategies:

- No action – appropriate when weather, sea, or other conditions make other options unsafe and/or infeasible. Also appropriate when response actions or site access will cause further environmental damage (e.g., wetlands).
- On-water recovery – mechanical removal of floating oil by sorbent materials, vacuum trucks, and skimming devices.
- Subtidal recovery – mechanical removal of sunken oil by dredges, pumps, or submersible equipment.
- Exclusion Booming – deploying various types of boom to keep oil out of a sensitive area.
- Deflection Booming – deploying various types of boom to divert oil away from a sensitive area and/or divert oil toward a collection point.

4620 *Chemical Countermeasures*

References:

- (a) 40 C.F.R. Part 300, National Contingency Plan
- (b) Federal Region I Oil and Hazardous Substance Pollution Emergency Contingency Plan
- (c) EPA National Contingency Plan Product Schedule

The Maine and New Hampshire Area Committee agree that the primary method of cleaning up oil shall be the mechanical removal of oil from the environment. The Committee recognizes that in certain circumstances timely effective mechanical containment, collection, and removal of the oil may not be possible, and the utilization of chemical countermeasures, alone or in conjunction with other removal methods, may be considered as a means to minimize a substantial threat to public health or welfare, or minimize serious environmental damages.

The Maine and New Hampshire Area Committee recommends that dispersants be considered as a potential first response option to oil spills, along with other response actions. Implementation of this



recommendation must consider logistical requirements, contingency planning, equipment and dispersant training.

Sensitive inshore habitats such as salt marshes, reefs, sea grasses, and other sensitive areas, are best protected by preventing oil from reaching them. Dispersion of oil at sea, before a slick reaches a sensitive habitat, generally will reduce the overall, and particularly the chronic, impact of oil on many habitats.

Because the principal biological benefit of dispersant use is prevention of oil stranding on sensitive shorelines, and because dispersability of oil decreases rapidly with weathering, prompt response is essential. Therefore, regulations and contingency planning should make rapid response a priority. In view of the need for a rapid response involving dispersants the Area Committee has developed a preauthorization plan (section 4628) which describes the procedures to be followed for obtaining an expedited decision for the use of dispersants in waters covered under this plan.

To be successful at responding to oil spills, particularly large oil spills, responders must be able to combat the spill with as many "tools" as possible. Dispersants, in-situ burning, and bioremediation agents are all tools that have demonstrated usefulness in past oil spills. Thoughtful consideration must be given to all oil spill response options in order to maximize the response effort.

4621 *Dispersants*

Dispersion may be defined as the act or state of being broken apart and scattered. Oil floating on water will ultimately disperse naturally in response to currents and waves. As the degree of surface energy increases, the rate of natural dispersion increases. Typically, however, this process is slow and may allow an oil slick to move considerable distances and threaten large areas. Additionally, natural dispersion commonly results in the formation of persistent and difficult to treat water-in-oil emulsions (tar balls, mousse).

With the proper use of chemical treating agents (or dispersants), the rates of dispersion can be greatly increased, reducing the potential damage associated with floating slicks. Once dispersed under appropriate conditions, the oil is diluted and degraded rapidly to concentrations not believed dangerous to the environment. Dispersants also restrict or prevent the formation of water-in-oil emulsions.

Dispersant formulations contain varying amounts of surface-active agents (or surfactants). Technically, surfactants act to modify (reduce) the oil's surface tension. Each surfactant molecule may be thought of as polar in nature, one end having an affinity for oil, and the other an affinity for water. When applied to floating oil, the surfactant diffuses through the oil and individual molecules orient themselves (water-attracting ends out) at the oil-water boundary. (It is critical that the dispersant be applied to the oil and not the surrounding water.) As the slick is broken apart by natural or manmade energy, treated particles of oil are repelled, preventing slick deformation. Eventually treated oil particles are broken into small enough drops that they remain suspended and dispersed in the water column. This suspension of oil droplets should not be confused with sinking. Dispersant treatment does not, in itself, result in the sinking of oil. Further, as only surface tension properties are modified, dispersants do not change the chemistry of the oil or render it more toxic.

4622 *Habitat Considerations*

The following are habitats in which:

- Dispersant usage is an option for oil spill cleanup if slick dispersion is desirable.
Open water (waters deeper than 5 fathoms)
- Dispersant usage is a viable option for oil spill cleanup, although other methods may be preferred.
Enclosed bays and harbors, providing the area is adequately flushed by tidal or current action and has adequate volume of dissolved oxygen.



- Dispersant usage is not advisable but may be considered under some circumstances, e.g., if long-term impact can be avoided. Should probably be authorized only if there is adequate flushing by tidal or current action.
 - Intertidal sea grass beds
 - Wade zone sea grass beds
 - Shallow subtidal sea grass beds
 - Kelp beds
- Dispersant usage should be avoided. (Note: There may be exceptions to this e.g., if oil threatens long-term impacts on one or more sensitive areas).
 - Bird and marine mammal habitats
 - Salt marshes
 - Tidal flats
 - Soft bottom subtidal

4623 *Dispersant Types*

There are three basic types of modern dispersants:

- water base;
- solvent base; and
- concentrate.

They differ mainly in the nature of their carrier medium and the ease with which dispersions are formed.

- Dispersion using water-base formulations typically require more time and energy. Because they use water as a solvent, their products can be diluted on-site with sea water, thus lending themselves to vessel application.
- Solvent-base formulations tend to disperse easier, but are generally more toxic and require higher dosage rates. Their intended use is for heavy and weathered oils. They are ineffective when diluted with water.
- Concentrates contain high percentages of surface-active agents. Depending on the product, they may be used full strength, diluted with sea water, and/or diluted with hydrocarbon solvents. The "self-mixing" type of concentrate requires extremely low levels of mixing energy. By virtue of their versatility, dispersant concentrates lend themselves to most methods of application they are particularly suitable for aerial use.

4624 *Dispersant Selection*

The effectiveness of any dispersant is dependent on its formulation, characteristics of the oil to be dispersed, method of application, and certain environmental conditions. Product selection should be based on maximizing effectiveness and minimizing potential environmental effects.

The initial step in dispersant selection is identification of types compatible with the oil in question.

Dispersants suitable for marine use can be divided into three generic types: water base, hydrocarbon solvent base, and concentrate. Water-base dispersants are miscible with water and can be applied both full strength and diluted with sea water. Generally, an external source of mixing (breaker boards, propwash, etc.) is required for optimum effectiveness. Hydrocarbon solvent-base dispersants are not miscible with water and cannot be applied by eduction or injection into sea water. As a result of their solvent properties, they are more effective with viscous, waxy, or emulsified oil than are other types. External mixing is generally required.

Concentrates contain high percentages of surface-active ingredients (greater than 50 percent by volume) and may be applied at lower dosages than other types. They may be applied full strength or diluted with sea water or hydrocarbon, depending on their inherent solvent system.



Each dispersant type is most appropriate for specific ranges of oil type. It should be noted that the properties affecting an oil's dispersibility typically change as weathering proceeds. Accordingly, dispersant requirements may change with time.

Numerous products may be available under each dispersant type. Under provisions of the National Oil and Hazardous Material Spills Contingency Plan, chemical agents shall not be considered for use as dispersing agents unless they have been accepted by the Environmental Protection Agency (EPA), and listed in the National Contingency Plan Product Schedule (available by calling the NCP Hotline at 202-2602342). To be useful, dispersants must be on-scene in sufficient quantity and in a timely fashion. Product selection should also consider effectiveness and toxicity. Desirable products should combine maximum effectiveness and minimum toxicity.

Measures of effectiveness and toxicity are typically based on laboratory evaluations, and as such, are difficult to apply directly to field situations. Data of this type should be used only in the most general sense, such as in rough product screening. Accurate evaluation of field effectiveness may require trial application.

4625 Application Method Selection

Selection of the proper application method is as important as selection of an appropriate dispersant. Application methods are determined by the characteristics of the dispersant to be applied, the nature and location of the spill, and limiting environmental conditions.

The basic types of dispersant application systems include spray booms attached to vessels, portable and integral vessel fire systems, and aerial spray systems using a variety of helicopters and fixed wing aircraft. For small spills, use of a single application method may be acceptable. For such spills, vessel, helicopter, or light aircraft systems are most practical. For larger spills, rapid treatment of extensive areas may be desirable. Under such circumstances, large aerial application systems or use of several types of systems may be required.

4626 Making The Dispersant Use Decision

An on-scene coordinator has a range of options available for combating oil spills. The OSC must examine conventional response alternatives such as source containment and shoreline protection and cleanup for comparison to dispersant application.

At times when physical control and recovery are not feasible and important resources or shoreline areas are threatened, dispersant may be the best method to protect sensitive areas. The dispersant use guidelines in Section 4627 are designed to define the scope of the dispersant approval problem, organize information required to reach a decision, and specify a range of answers beyond a simple approval or disapproval.

Four areas of information are identified in the guidelines below:

- data about the spill source, oil, and physical conditions on scene,
- delineation of the requirements for dispersant response and physical control options,
- identification of potential environmental and economic costs of possible response options, and
- evaluation of the consequences of dispersant application and recommendations on a course of action.

STEP ONE: The first priority in any spill is to identify the spill source, cause, rate of release, and type of oil. Once the oil type is known its properties, specific gravity, viscosity, pour point, etc. can be determined. Data are also gathered on the physical conditions on scene, including temperature, wind speed and speed direction, water temperature, salinity, and depth.

The OSC uses this information to make a preliminary assessment of whether or not dispersants would be effective or desirable. For example, a very viscous oil near its pour point in cold water would most likely



not be dispersible. Conversely, a light fuel, with heavy seas, might disperse naturally before chemicals could be mobilized.

STEP TWO: If it is decided that dispersants could be of use, the next step is to evaluate the movement of the oil, both dispersed and undispersed. Accurate oil trajectory forecast modeling may be a critical element in the decision process, providing predictions of travel time to land, slick surface area, and length of expected shoreline impact. Each aspect of the forecast is used to evaluate the logistics of dispersant application and the potential environmental impact.

The OSC can now assemble information on the available dispersants and application equipment for the spill at hand. The OSC must ensure that the dispersant type is effective on the oil spilled and compatible with the proposed application method and that enough dispersant is available to combat the forecasted slick surface area. It is important not to initiate dispersant application without sufficient supplied or logistical support; such an effort could fail, compounding the environmental effects. The OSC uses logistical information to plan a schedule of application, determine the location and area of slick to be treated, not set a dose rate of dispersant to oil. The OSC can get assistance on this matter from the USCG Strike Team, EPA Environmental Response Team, and industry representatives for assistance.

STEP THREE: To hasten a decision, the involved natural resource trustees/Scientific Support Coordinator (SSC) examine the resources at risk for both a dispersant-treated spill and an untreated spill, while the OSC is examining the logistics of dispersant use. The SSC distinguishes threatened resources by studying oil travel paths identified by trajectory forecasts.

Shoreline habitat types, including critical habitats for endangered species are identified within the area of expected impact. The relative threat posed by oil to a particular area can be rapidly evaluated if ranking of shoreline areas (such as an Environmental Sensitivity index) has been completed for a region. Specific categories of wildlife present in the threatened areas are also identified. These categories include endangered and threatened species, marine mammals, waterfowl, fish, mollusks, and crustaceans and their respective seasonal variation and sensitive life stages. Commercial and public use areas such as aquaculture sites, parks, and marinas are also considered. The SSC will rely on state and federal resource agencies for guidance in developing resources protection priorities.

Although there have been attempts at quantitatively ranking environmental impacts associated with oil and dispersants in the environment and there are hundreds of publications on the toxicity of dispersants, it is difficult to predict the response of a particular population or system to oil and dispersants in a specific geographic area. Post experience can provide guidance on areas not appropriate for dispersants. If the time of travel of oil to shore is short, dispersion may not be completed before landfall, and therefore shoreline impacts may not be mitigated. Oil penetration and persistence in sediments may be increased when dispersants are used in inshore areas. Areas of low natural water exchange where dilution is slow might experience greater environmental harm from dispersant and oil mixtures than from oil alone.

STEP FOUR: Having gathered the information required by the guidelines, the OSC may decide for dispersant use. Experience has shown that in most cases it takes hours to gather the information. There are four determinations an OSC can make:

- Do not use dispersants.
- Use dispersants on a trial basis (to ensure effectiveness).
- Disperse in limited or selected areas
- Disperse to the maximum extent possible with accepted methods.

4627 Guidelines for Dispersant Use Decision Making

These guidelines are intended as an aid to the OSC in deciding whether or not to use dispersants in response to an oil spill. A decision relative to the use of dispersants will be in accordance with the Preauthorization Plan (section 4628).



Maine and New Hampshire Area Contingency Plan

PLANNING

The following outline illustrates the information that must be considered for a dispersant use decision to be made.

I. DISPERSANT USE OUTLINE.

A. SPILL DATA

- (1) Circumstances:
- (2) Time/Date:
- (3) Location:
- (4) Type of Oil:
- (5) Volume Released:
- (6) Total Potential of Release:
- (7) Type of Release (Instantaneous, Continuous, Intermittent):

B. CHARACTERISTICS OF THE SPILLED OIL

- (1) Specific Gravity:
- (2) Viscosity:
- (3) Pour Point:
- (4) Flash Point:
- (5) Relative Toxicity:

C. WEAX/WATER CONDITIONS

- (1) Air Temp:
- (2) Wind Speed/Direction:
- (3) Tide/Current Info:
- (4) Sea Conditions:
- (5) Water Temp/Salinity:
- (6) Water Depth at Spill Location:

D. OIL TRAJECTORY INFORMATION

- (1) 48-Hour Surface Oil Trajectory Forecast:
 - (a) Surface area of slick
 - (b) Expected areas of landfall
- (2) 48-Hour Dispersed Oil Trajectory Forecast:
 - (a) Oil movement in water column
 - (b) Surface oil movement
 - (c) Expected landfall

E. CHARACTERISTICS OF AVAILABLE DISPERSANTS & APPLICATION EQUIPMENT

- (1) Characteristics of the Dispersant(s)
 - (a) Name:
 - (b) Manufacturer:
 - (c) When available:
 - (d) Location(s):
 - (e) Amount available:
 - (f) Type of containers:
 - (g) Toxicity:
 - (h) Application methods:
 - (i) Miscellaneous:
- (2) Type of Transportation & Dispersing Equipment
 - (a) Name:
 - (b) Location:
 - (c) Time to arrive:
 - (d) Equipment available:
 - (e) Other:

F. INFORMATION ABOUT AVAILABLE DISPERSANT AND DISPERSING EQUIPMENT

- (1) Name on EPA & State Acceptance List
- (2) Type (Self-Mix, Concentrate, Solvent, Other)
- (3) Proposed Application Method(s) & Rates



- (4) Efficiency (% Dispersed & Volume Dispersed)
- (5) Schedule of Operation
- (6) Location of Area to be Treated
- (7) Surface Area of the Slick Which can be Treated in the Schedule Time Period

G. CONSIDERATIONS FOR CONVENTIONAL METHODS OF CONTAINMENT AND CLEANUP
(COULD DISPERSION AID IN REDUCING IMPACT)

- (1) Containment at source
- (2) Shoreline Protection Strategies
- (3) Shoreline Cleanup Strategies
- (4) Time Necessary to Execute Response

H. HABITATS AND RESOURCES AT RISK

- (1) Habitat
- (2) Resources

I. ECONOMIC CONSIDERATIONS

- (1) Cost of Dispersant Operation
- (2) Cost of Conventional Containment & protection
 - (a) With dispersant use
 - (b) Without dispersant use
- (3) Cost of Shoreline Cleanup (Cost per Barrel X # of Barrels Reaching Shoreline)
 - (a) With dispersant use
 - (b) Without dispersant use

4628 *Preauthorization For Dispersant Use*

4628.1 Purpose

This Preauthorization Plan is designed to implement sections of Subpart J of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and implement the requirements of Title 33 United States Code 1321(j)(4)(v) of the Federal Water Pollution Control Act, as amended, (FWPCA) that the Area Contingency Plan (ACP) shall "describe the procedures to be followed for obtaining an expedited decision regarding the use of dispersants." This Plan provides preauthorization for the use of dispersants by the Coast Guard On Scene Coordinator (FOSC). This preauthorization applies only in designated zones in the Coast Guard Captain of the Port Portland, Maine geographic area of responsibility.

This Plan also implements Subpart J (Use of Dispersants and Other Chemicals) and Appendices 300.945 and 30C.950 of Region I New England Regional Contingency Plan (RCP).

4628.2 Authority

Section 311(d)(2)(G) of the FWPCA requires the NCP include a schedule for identifying "dispersants, other chemicals, and other spill mitigating devices and substances, if any, may be used in carrying out" the NCP. These are referred to as "chemical countermeasures" and are listed on the NCP Product Schedule. The responsibility to maintain the NCP Product Schedule was delegated to the Administrator, Environmental Protection Agency, by Executive Order 12777, and is carried out under Subpart J of the NCP.

Subpart J of the NCP authorizes the Regional Response Team (RRT) representatives from EPA and the States with jurisdiction over the waters of the area to which a Preauthorization plan applies, and the DOC and DOI natural resource trustees, to approve in advance the use of certain products under specified circumstances as described in the preauthorization plan. The FOSC may authorize the use of the products without obtaining the specific concurrences described above under Subpart J of the NCP.

Subpart J further provides that for spill situations that are not addressed by the preauthorization plans described previously, the FOSC, with the concurrence of the EPA representative to the RRT and the



Maine and New Hampshire Area Contingency Plan

PLANNING

States with jurisdiction over the navigable waters threatened by the oil discharge, and in consultation with DOC and DOI natural resource trustees, may authorize the use of chemical and biological countermeasures on oil discharges; provided that such chemical and countermeasures are the NCP Product Schedule.

Commandant, United States Coast Guard, has pre-designated the Coast Guard Captain of the Port Portland, Maine as the FOSC for oil discharges in COTP Portland Zone (as defined in 33 CFR Part 3, and subject to joint response boundary agreements with the EPA) and has delegated to the COTP the authority and responsibility for compliance with the FWPCA.

The Legislature of the State of Maine has authorized the Commissioner of the Department of Environmental Protection (MEDEP) to designate an Oil Soil Coordinator, with the authority to approve the use of chemical countermeasures for the control of oil spills.

The Waste Management Division of the New Hampshire Department of Environmental Services (NHDES), under the authority of state law RSA 146A:4, assumes primary jurisdiction for response to oil spills in the state. Accordingly, the authority and responsibility for providing approval for the use of chemical countermeasures for control of oil spills rests with the Division Director or his designee.

The US DOI and DOC/NOAA are designated Federal trustees of certain natural resources under Subpart G of the NCP and are to be consulted regarding the determination to apply dispersants to oil discharges in U.S. waters.

The Region I RRT representative from EPA and the DOC/NOAA and DOI natural resource trustees approve in advance the use oil certain dispersants under specified circumstances as described in this Plan. As specified in this Plan, the FOSC, in consultation with MEDEP and NHDES, may authorize the use of these products without obtaining the specific concurrences from EPA, DOC/NOAA and DOI.

4628.3 Scope

This preauthorization Plan is applicable to the marine waters of the COTP Portland Zone (defined in 33 CFR Part 3). These waters, for the purpose of this plan, are divided into four zones geographic areas and conditions under which dispersant use is Preauthorized are as follows:

Zone 1 - Preauthorization Zone

Geographic scope:

Zone 1 is defined as waters that lie 0.5 nm from the Territorial Sea Baseline (as defined in 33 CFR 2.05-10) along the coast of Maine and New Hampshire to the outermost extent of the Exclusive Economic Zone.

Advance approval for Zone 1:

The FOSC, in consultation with MEDEP and NHDES, may authorize the use of dispersants in Zone 1 in accordance with the protocols listed in section 4628.4 of this Plan with the exception of Special Consideration Areas listed below.

Zone 2 - Concurrence Zone

Geographic scope:

Zone 2 is defined as waters that lie within 0.5 nm of the Territorial Sea Baseline along the coast of Maine and New Hampshire, including all bays and coves.

Advance approval for Zone 2:

No preauthorization is given for Zone 2. The use of dispersants in this Zone will require concurrence and consultation with the specified agencies in accordance with Subpart J of the NCP and Subpart J of the Region I Regional Response Plan.



Special Consideration Areas

Special Consideration Areas (SCA's) will be designated and described in writing by the natural resource trustee (or his/her designated representative) for the State of Maine, the State of New Hampshire, the National Oceanic and Atmospheric Administration, and the Department of the Interior.

Special Consideration Areas will consist of restrictions imposed on the use of dispersants for specific geographic areas to be described in this Plan. These restrictions may range from outright prohibition to a requirement for consultation prior to deployment of the chemicals. They may be special, seasonal or species-specific in nature. Each Special Consideration area submitted by the above mentioned representatives shall describe the specific conditions to be applied on the use of chemical dispersants, include primary and alternate point of contact telephone numbers.

Changes to any aspect the Special Consideration Areas will be submitted, in writing, to the Chairperson of the Area Committee and will take effect thirty (30) days following receipt by the Chairperson. Upon receipt, the Chairperson will provide copies of these changes, as soon as practical, to the membership of that Area Committee and to the Co-Chairpersons of the Region One Regional Response Team.

Special Consideration Area 1

Geographic Scope:

SCA 1 is defined as the waters that lie from 0.5 nm the Territorial Sea Baseline to 2.0 nm from the Territorial Sea Baseline

Approval for SCA 1:

The use of dispersant this SCA requires concurrence and consultation with the DOI. Once the appropriate contact person for the DOI is notified, the DOI will reach a decision within one (1) hour as to whether the use of a dispersant will be detrimental to trust resources. The appropriate contact person for the DOI must be contacted directly. Voice mail messages do not constitute "contacts." No response by the DOI would constitute approval of the use of dispersant in this SCA.

Special Consideration Area 2

Geographic Scope:

SCA 2 is defined as the waters that lie within 2.0 nm from the boundaries of any offshore islands owned or managed by the DOI that are beyond 0.5 nm from the Territorial Sea Baseline.

Approval for SCA 2:

The use of dispersants in this SCA is approved to the 0.5 limit (with the further restriction of SCA 1 above within the 0.5 to 2.0 nm) except in the following windows of time:

- From May 15 to August 15 dispersant use in this SCA requires concurrence and consultation with the DOI.
- From January 1 to March 31 it is recommended that concurrence with the DOI be obtained prior to dispersant use.

4628.4 Protocols

As attested by the approval of this Preauthorization Plan, the RRT I representatives from EPA, MEDEP, and NHDES, and the DOI and DOC/NOAA natural resource trustees, agree that the predesignated FOSC has the authority and may order the use of dispersant on oil discharges using the guides found in Subpart J of the NCP, Appendix 300.945 and 300.950 of the Region I RCP and this section of the Maine and New Hampshire ACP and subject to the following conditions:

The decision to use dispersants within these Guidelines rests with the pre-designated FOSC, in consultation with MEDEP and NHDES.



The FOSC may authorize the use of dispersants on a release or discharge to prevent or substantially reduce a hazard to human life without obtaining concurrence from EPA, affected States, DOT, and DOC/NOAA, without following protocols established in this Plan, and without following the guides in the RCP and ACP. If dispersants are used in this manner, notification to EPA, affected States, DOI, and DOC/NOAA shall be made as soon as practical. Once risk to human life has subsided, these exceptions no longer apply.

The dispersants listed in the NCP Product Schedule and as further pre-approved by Federal natural resource trustees may be authorized for use in Zone 1 by the FOSC, in consultation with MEDEP and NHDES, without further specific concurrence from EPA, DOT and DOC/NOAA.

If a decision has been made by the FOSC, in consultation with MEDEP and NH-DES, to use dispersants under the provisions of this Plan, the FOSC will immediately notify the EPA, DOI, and DOC/NOAA of that decision. This initial notification will include, but is not limited to, the following information to the extent available:

- Type and amount of oil discharged.
- Areas effected.
- The projected area of impact of the oil if not dispersed.
- Type of chemical agent to be used.
- Application rate and method.
- On scene weather.

If dispersants are used as described in this Plan or for the protection of human life, a post incident debriefing will take place within 45 days to gather information concerning the effectiveness of the chemical accents used and whether any changes to this Plan are necessary. The results of the debrief will be included in the FOSC report.

Monitoring for dispersants application and effectiveness will be conducted. An inability to implement a Monitoring Plan in a timely manner will not revoke the FOSC's authorization to use dispersants under this Plan. However, the FOSC should make all attempts to implement a Monitoring Plan as soon as practical.

4628.5 Amendments

This Preauthorization Plan shall be reviewed annually by the Maine and New Hampshire Area Committee at the first meeting of the full Area Committee in the calendar year.

The following Table is a list of dispersant resources.



Maine and New Hampshire Area Contingency Plan

PLANNING

4629 Dispersant Resources

Name of Supplier/Location	Telephone	Product/Amount Equipment	Time O/S	Notes
Air Response, Inc. Mesa, AZ	602 844 0800 602 246 3336	1 DC-4 airplane equipped with 2,000 capacity in-line spray systems	8-10 hrs	Must contract plane from Clean Bay, Clean Seas, or Clean Sound; non-co-op members may experience contractual delays
Airborne Support, Inc. Houma, LA	504 851 6391	COREXIT 9527 24,000 gals DC-4 plane w/2,000 gal capacity DC-3 plane w/1,200 gal capacity DC-3 plane w/1,000 gal capacity Twin engine spotter plane Assoc'd loading pumps	12 hrs	Available w/in time frame to members / federal agencies; non-members expect contractual delays; DOT containers not practicable for transportation to D1; would use loaded planes for initial pass then load w/dispersants from NE
Biegert Aviation, Inc. Chandler, AZ	520 796 2400	2 ADDS-PACK systems; ancillary pumping equipment	15 hrs	Company has no a/c to deliver systems; time o/s dependent on a/c availability.
Clean Bay, Inc. Concord, CA	510 685 2800	COREXIT 9527 10,000 gals in 55- gal drums	20-24 hrs	Available to members and other co-op members through mutual aid; non-co-op members may experience contractual delays; time o/s dependent on availability of a/c
Clean Caribbean, Coop. Port Everglades, FL	504 593 6700	COREXIT 9527 5,000 gals in bulk tank; 9570 gals in 55-gal drums COREXIT 9500 15,840 gals in 55- gal drums. 1 ADDS-PACK unit 2 VOSS spray systems 2 helo spray buckets	14-16 hrs	Available to CCC members and federal agencies; must provide transportation and deployment a/c; time on scene dependent on availability of a/c.
Clean Gulf Associations Houston, TX	504 593 6700	COREXIT 9527 12,265 gals in 55- gal drums; COREXIT 9500 17,160 gals in 55-gal drums	14-16 hrs	Available to members and federal agencies at this time; plan the place to accommodate non-members; buyer must transport; time on scene dependent on availability of a/c.
Grand Isle, LA		COREXIT 9527 3,465 gals in 55- gal drums	16-18 hrs	
Panama City, FL		COREXIT 9527 2,200 gals in 55- gal drums	14-16 hrs	
Clean Harbors co-op Edison, NJ	908 738 3002	COREXIT 9527 1,375 gals in 55- gal drums in trailer 1 workboat spray system 1 220-gal helo bucket	10 hrs	Available to members and non-members but must be replaced "in kind"; time on scene dependent on availability of aircraft.
Clean Seas	805 684 3838	COREXIT 9527 11,000 gals in 55-	20-24 hrs	Available to members and other co-op



Maine and New Hampshire Area Contingency Plan

PLANNING

Carpenteria, CA		gal drums 2 90-gal helo buckets		members through mutual aid; non-Co-Op members may experience delays; time on scene dependent on availability of a/c.
Clean Sound co-op Edmonds, WA	206 744 0948	COREXIT 9527 6,250 gals in 30-gal containers; Pumps, hoses, misc. gear	20-24 hrs	Available to members and other co-op members through mutual aid; non-Co-Op members may experience contractual delays; time on scene dependent on a/c.
CISPRI Anchorage, AK	907 776 5129	COREXIT 9527 11,275 gals in 55-gal drums 2 helo buckets	24-30 hrs	Release of resources contingent upon state approval; time on scene dependent on availability of a/c.
Delaware Bay River co-op Slaughter Beach, DE	302 645 7861	COREXIT 9527 1,650 gals in 55-gal drums 1 VOSS spray system 1 TC3 helo bucket	6 hrs	User must transport resources to deployment site; time on scene dependent on availability of a/c; spray system/helo bucket available for lease.
EADC Fort Pierce, FL	603 778 1813	3 500-gal capacity a/c	8 hrs	Experienced dispersant crews aboard all a/c. Requires fast tanks, forklifts, 3" pump;
Monroe, LA		1 600-gal capacity a/c	8 hrs	can use small (1500') runways.
MSRC Lyndon, NJ	908 417 0500	1 800-gal capacity a/c COREXIT 9527 24,600 gals in 55-gal drums 4 Rototech 150-gal helo buckets	10 hrs 12 hrs	MSRC will transport drums to a/c loading site; require tank trucks, 3" pump, and forklifts. Time on scene dependent on availability of aircraft.
Maine Department of Environmental Protection Westbrook, ME	207 822 6340 207 287 2651	COREXIT 7664 165 gals in 55-gal drums; COREXIT 9527 220 gals in 55-gal drums 1 VOSS spray system	1-6 hrs	Resources for use in Maine only; availability through Div. Of Response Services; time on scene dependent on spill location.
NALCO/Exxon Energy Chemicals Sugarland, TX	281 263 7879	COREXIT 9527 200,000 gals in 55-gal drums; COREXIT 9500 (stockpile in flux) stored in 55-gal drums.	12 hrs	Additional 200,000 gals available in 2 days; buyer transports from Houston Airport; time on scene dependent on availability of a/c. Also supplies COREXIT 9580 (shoreline cleaner) available 2-3 days after ordering.
NRC Miami, FL	516 369 8644	COREXIT 9527 5,000 gals in 55-gal drums.	12 hrs	Time on scene depends on availability of a/c.
Oil Spill Response Limited South Hampton, UK	44 1703 331 551	COREXIT 9500 100 drums 1 ADDS-PACK system 1 L100 airplane	10-14 hrs	Company currently owns Enersperse 1583, which is not on NCP product schedule, has plans to purchase COREXIT 9500.
SEAPRO INC. Sitka, AK	907 225 7002	COREXIT 9527 16,445 gals in 55-gal drums, 30 per 20' container	18-20 hrs	Transit arrangements are possible in amounts of 5,000 gals/plane; time on scene dependent on availability of a/c and prior logistical planning.



Maine and New Hampshire Area Contingency Plan

PLANNING

Southern Air Transport Worldwide locations	800 327 6456	13 I100 freighter aircraft 6 of which can be equipped to carry 18 passengers in addition to 40,000 lbs. of cargo.	6-24 hrs	Time on scene dependent on location and availability of a/c. Crews are dispersant deployment trained. Requires ADDS-PACK units for dispersant deployment.
USAF Youngstown, OH	330 392 1111	C-130H Aircraft	12 hrs	Planes require 5000' of runway to land loaded. Requires: 3" fitting, tank trailer, pump, jet fuel, spotter, and plane with crew.
X Products & Services, INC Colorado Springs, CO	719 576 8047	SX-100 4,840 gals in 55-gal drums.	14 hrs	Time on scene depends on availability of a/c.



4630 Disposal Strategies

The disposal of recovered spilled oil and contaminated debris can pose immediate and long-term problems. These problems can include short-term storage, identification of acceptable disposal sites, obtaining a complete assay of the spilled material to ascertain its make-up, and arranging for transport of the material. Due to the potential for huge disposal needs in the event of an oil spill, this section provides general guidance regarding this topic for both New Hampshire and Maine.

Prior to the disposal of recovered oil and oily debris there is often times a need to temporarily store recovered material. Temporary waste storage will inevitably be part of response operations to an oil spill of nearly any size. The selection of temporary storage sites will be partly dictated by where the oil and oily debris is recovered, and by what acceptable temporary waste storage sites are available in the area of operations. If no suitable sites are available near the response operations then transport of the material will be necessary. Temporary storage sites should be selected and prepared to minimize contamination of surrounding areas from leaching (migrating) oil. If possible, storage sites should not be located on or adjacent to ravines, gullies, streams, or the sides of hills. Once a location is selected, certain site preparations are usually necessary to contain oil that may leach or flow from the site. Temporary storage of oily debris on a large plastic tarp, surrounded by an earthen berm, is a method commonly used to reduce or eliminate the migration of oil from the site. The need for creativity and resourcefulness in providing for the short-term storage of oily waste cannot be emphasized enough. Planning before an oil spill for temporarily storing oily waste and debris will enable the response effort to continue smoothly without being bogged down by storage site consideration at the time of a spill. As with any aspect of oil spill response, there will be the unexpected, so complete consideration of all eventualities is impossible; however, storage and disposal of oily waste is an aspect of the response effort that can, and must, be given planning consideration before a spill occurs.

4631 NEW HAMPSHIRE

In New Hampshire, oil and oily debris is managed as a solid waste. Within the Department of Environmental Services, the Waste Management Division is responsible for permitting of storage and disposal facilities. The Division also regulates facility operations through its administrative laws.

SHORT-TERM STORAGE. Under Division Administrative Rules, Env-Wm 300, both liquid and oil debris are regulated. By policy, wastes can be stored up to 120 days without a permit. All sites for storage must first be approved by the Division. Preferably, storage should be at the point of generation (or nearby). For a discharge from a vessel (at a facility), if the facility is unwilling to take responsibility, the ship's agent may be required to locate a suitable site. A condition of storage requires that the waste be isolated from the environment. A liner of either synthetic material or clay must be installed prior to waste being stored.

LONG-TERM STORAGE. Wastes that are stored on-site in excess of 120 days may, at the discretion of the Division, require a permit. Three types of permits are issued by the Division: 1) standard; 2) temporary; and 3) limited. When these rules were established, no consideration of large oil discharges was foreseen; therefore, a standard permit would be required for long-term storage. Several options are available to the responsible party. Under Env-Wm 202, the responsible party may request a waiver from obtaining a permit. For liquids stored in a facility tank, the Division should approve the waiver. A site that transitions from a short-term to a long-term storage site for oil debris may not receive a waiver from the Division. The responsible party can petition the Division to issue a limited or temporary permit under Env-Wm 302. Many of the standards required in a standard permit are exempt in limited and temporary permits.

DISPOSAL. Any permanent disposal facility for oil debris would require a standard permit under Env-Wm 300. The permit application process in New Hampshire is rather rigorous. A landfill would be the type of facility required for disposal. Design standards would be defined in the permit. As with all facilities, the landfill would have to comply with environmental performance standards, operating standards, and finally the responsible party would be required to demonstrate financial assurance for closure. The application process, at its best, would require six months to process, but several years is not uncommon for issuing a



Maine and New Hampshire Area Contingency Plan

PLANNING

permit. With all the requirements mentioned, off-site disposal may be the most efficient and economical alternative. No solid waste facility in New Hampshire is permitted to accept liquid waste. Out of state disposal as a hazardous waste is the only option. However, several facilities in the State can accept oily debris. In New Hampshire, two waste-to-energy recovery facilities are operated by Wheelabrator which can accept only debris. The facilities are:

- Wheelabrator Concord
11 Whitney Road
Penacook, NH 03301
(603)753-8411
- Wheelabrator Claremont
Grissom Lane
Claremont, NH 03743
(603)542-8764

Two private landfills are located in New Hampshire that also accept oily debris. They are:

- Turnkey Landfill of Rochester
90 Rochester Neck Road
Rochester, NH 03876
(603)332-2386
- Sanco Landfill
Trudeau Road
Bethlehem, NH 03574
(603)869-3366

4632 MAINE

In the event of a major oil spill, the volume of oily debris will most likely be greater than the capacity of available disposal facilities. Therefore, temporary storage must be used as an interim measure. The Department of Environmental Protection (DEP) has no permitting requirements for the temporary storage (less than 45 days) of oil debris. Options include storing oily debris in covered dumpsters or covered "roll-off" containers, or in temporary engineered containment structures with oil-resistant liners.

DISPOSAL OF OILY DEBRIS. Oily debris recovered during response activities must be disposed of in accordance with state and federal law. Oil debris includes sorbents, seaweed, carcasses, and other materials contaminated with oil as a result of a marine oil spill. Under Chapter 405.6 of DEP regulations, oily debris can be landfilled, or incinerated and the resultant ash landfilled. The DEP has a contract with the Mid-Maine Waste Action Committee in Auburn for disposal of combustible oily debris.

DISPOSAL OF WASTE OIL. Waste oil is typically disposed of by burning in a waste oil burner. The requirements of Chapter 860 of DEP regulations must be met for storage and transportation of waste oil.

DISPOSAL FACILITIES.

Disposal facilities are listed under the Area Resources, section 5400.

HAZARDOUS WASTE AND WASTE OIL TRANSPORTER LICENSES

The Maine Department of Environmental Protection Hazardous Waste Transporter Licenses and Waste Oil Transporter Licenses document is included in this Tab by reference. Additional information regarding this document can be obtained through the Maine Department of Environmental Protection:

ME DEP
State House Station #17
Augusta, ME 04333
207-287-2651

4640 In-Situ Burning

Given the right circumstances and the necessary equipment, in-situ burning could prove an effective means of mitigating an oil spill.



USE CONSIDERATIONS. There are several things that must be considered when making the decision to use in-situ burning as an oil spill response option:

- The ignition and burning of oil spills seems to be a feasible countermeasure of certain open water spills. The use of fire resistant boom is the recognized preferred method.
- Combustion efficiency is primarily a function of spill volume; the larger the spill the higher the combustion efficiency.
- The sooner the slick is ignited, the higher the combustion efficiency.
- Ignition of the periphery of the slick results in combustion efficiencies almost as high as those for ignition of the entire surface area.
- Air, entrained by the combustion of this oil slick induces an inward surface current that inhibits and finally stops the oil's spread.

RECOMMENDATION. Like dispersants, in-situ burning may be used to reduce the amount of free-floating oil on the water to make terrestrial contact. In addition, where shoreline or terrestrial habits are already impacted (marshes), in-situ burning may be more desirable than mechanical removal. In any event in-situ burning must be considered as a viable oil spill response option.

4641 Preauthorization Agreement for In-Situ Burning

Enclosed at the end of this section is the Memorandum of Understanding on In-Situ Burning. It outlines the preauthorization agreement for use of In-Situ Burning. Figure 4000-3 summarizes the agreement. In general, the FOSC has decision authority beyond 6 miles. In between 1 to 6 miles, it is a joint FOSC/SOSC decision. Inward of 1 mile, the decision must be made in consultation of trustees. The MOU also outlines Special Consideration Areas which may affect the decision making process. There are four Special Consideration Areas:

- State of Maine SCA
- 20 foot water depth SCA
- NMFS SCA
- National Ocean Service SCA

The State of Maine also has a Memorandum of Agreement regarding In-Situ Burning. The MOA is included as Figure 4000-4.

4650 Bioremediation

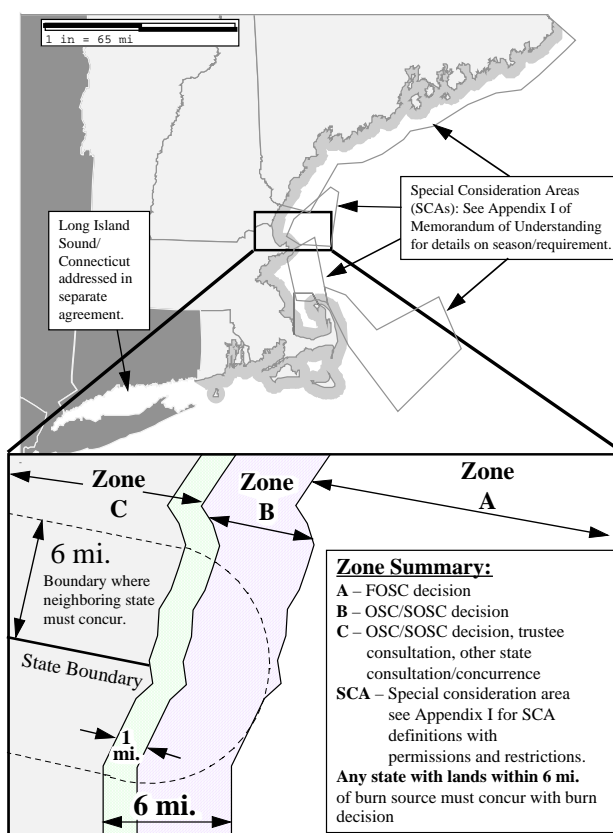
The National Oceanic and Atmospheric Administration report, A Summary of Bioremediation Applications Observed at Marine Oil Spills, Report HMRB 91-2, is included in this section by reference.

4660 Decanting

When oil is spilled on the water, mechanical recovery of the oil is the principal approved method of responding. However, the mechanical recovery process and associated systems necessarily involve placing vessels and machinery in a floating oil environment.

Incidental returns of oil into the response area, such as oil that falls back into the recovery area from vessels and machinery that are immersed and working in the oil, are an inevitable part of the mechanical

Figure 4000-3





recovery process. Similarly, separation or "decanting" of water from recovered oil and return of excess water into the response area can be vital to the efficient mechanical recovery of spilled oil because it allows maximum use of limited storage capacity, thereby increasing recovery operations.

This practice is currently recognized as a necessary and routine part of response operations. (See National Contingency Plan Revisions, 59 F.R. 47401, Sept. 15, 1994.)

In addition, some activities, such as those associated with oil recovery vessels, small boats and equipment cleaning operations, may result in incidental discharges. These activities may be necessary to facilitate response operations on a continuing basis, and all of these activities are considered to be "incidental discharges."

4661 Policy

This policy addresses "incidental discharges" associated with spill response activities. "Incidental discharge" means the release of oil and/or oily water within the response area in or proximate to the area in which oil recovery activities are taking place during and attendant to oil spill response activities. Incidental discharges include, but are not limited to, the decanting of oily water, oil and oily water returns associated with runoff from vessels and equipment operating in an oiled environment and the wash down of vessels, facilities and equipment used in the response. "Incidental discharges" as addressed by this policy, do not require additional permits and do not constitute a prohibited discharge. See 33 CFR 153.301, 40 CFR 300.

4662 Criteria

During spill response operations, mechanical recovery of oil is often restricted by a number of factors, including the recovery system's oil/water recovery rate, the type of recovery system employed and the amount of tank space available on the recovery unit to hold recovered oil/water mixtures. In addition, the longer oil remains on or in the water, the more it mixes to form an emulsified mousse or highly mixed oil/water liquid, which sometimes contains as much as 70% water and 30% oil, thus consuming significantly more storage space. Decanting is the process of draining off recovered water from portable tanks, internal tanks, collection wells or other storage containers to increase the available storage capacity of recovered oil. When decanting is conducted properly most of the petroleum can be removed from the water.

The overriding goal of mechanical recovery is the expeditious recovery of oil from water. In many cases, the separation of oil and water and discharge of excess water is necessary for skimming operations to be effective in maximizing the amount of oil recovered and in minimizing overall environmental damages. Such actions should be considered and in appropriate circumstances authorized by the FOSC and/or SOSC because the discharged water will be much less harmful to the environment than allowing the oil to remain on the water and be subject to spreading and weathering. During a response, it will likely be necessary for response contractors or a responsible party to request from the FOSC and/or SOSC authority to decant while recovering oil so that response operations do not cease or become impaired. Expeditious review and approval, as appropriate, of such requests is necessary to ensure a rapid and efficient recovery operation. In addition, such incidental discharges associated with mechanical recovery operations should not be considered prohibited discharges. Therefore, the Area Committee adopts this policy to provide for an expeditious approval process and provide guidance to OSCs, responsible parties, response contractors and other members of the spill response community relating to incidental discharges and decanting.

The Federal and State OSCs will consider each request for decanting on a case by case basis. Prior to approving decanting, the OSCs should evaluate the potential effects of weather including the wind and wave conditions, the quantity of oil spilled and the type of oil as well as available storage receptacles. The OSC should also take into account that recovery operations as enhanced by decanting will actually reduce the overall quantity of pollutants in a more timely and effective manner to facilitate cleanup operations.



Maine and New Hampshire Area Contingency Plan

PLANNING

The following criteria should be considered by the FOSC and/or SOSC in determining whether to approve decanting unless circumstances dictate otherwise:

- All decanting should be done in a designated "Response Area" within a collection area, vessel collection well, recovery belt, weir area, or directly in front of a recovery system.
- Vessels employing sweep booms with recovery pumps in the apex of the boom should decant forward of the recovery pump.
- All vessels, motor vehicles and other equipment not equipped with an oil/water separator should allow retention time for oil held in internal or portable tanks before decanting commences.
- When deemed necessary by the FOSC and/or SOSC or the response contractor a containment boom will be deployed around the collection area to minimize loss of decanted oil or entrainment.
- Visual monitoring of the decanting area shall be maintained so that discharge of oil in the decanted water is detected promptly.
- Decanting in areas where vacuum trucks, portable tanks or other collection systems are used for shore cleanup will be subject to the same rules as vessels.

The response contractor or responsible party will seek approval from the FOSC and/or SOSC prior to decanting by presenting the Unified Command with a brief description of the area for which decanting approval is sought, the decanting process proposed, the prevailing conditions (wind, weather, etc.) and protective measures proposed to be implemented. The FOSC and/or SOSC will review such requests promptly and render a decision as quickly as possible. FOSC authorization is required in all cases and in addition SOSC authorization is required for decanting activities in state waters.

The FOSC and/or SOSC will review and provide directions and authorization as appropriate to requests to wash down vessels, facilities and equipment to facilitate response activities.

Other activities related to possible oil discharges associated with an oil spill event such as actions to save a vessel or protect human life which may include such actions as pumping bilges on a sinking vessel are not covered by this policy. Oil Spill Decanting Authorization Form

4663 Oil Spill Decanting Authorization Form

See Figure 4000-5

4700 RESERVED FOR AREA



FIGURE 4000-4



STATE OF MAINE

DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN R. McKERNAN, JR.
GOVERNOR

MEMORANDUM OF AGREEMENT REGARDING IN SITU BURNING

DEAN C. MARRIOTT
COMMISSIONER

DEBRAH RICHARD
DEPUTY COMMISSIONER

This Agreement is between the Bureau of Hazardous Materials and Solid Waste Control and the Bureau of Air Quality Control within the Department of Environmental Protection. The purpose of this Agreement is to set forth the role of each bureau and the procedures to be followed with regard to in situ burning of oil and other petroleum products. The Bureau of Hazardous Materials and Solid Waste Control and the Bureau of Air Quality Control agree:

1. In situ burning is a method used to mitigate damages resulting from oil discharges into waters of the State. While mechanical removal is the preferred oil spill response method, the bureaus recognize that in situ burning may also be a viable response option in some instances. The "window of opportunity" for effective burning in situ ranges from a few hours to several days depending on many factors.
2. Unhealthful air quality conditions exist due to elevated ozone episodes which frequently occur along the coast from May through September each year.
3. The State Oil Spill Coordinator is the Director of the Division of Response Services within the Bureau of Hazardous Materials and Solid Waste Control. The State Oil Spill Coordinator may authorize in situ burning of spilled oil on land, inland waters and coastal waters of Maine. The State Oil Spill Coordinator shall not delegate responsibility to authorize in situ burning of spilled oil.
4. The State Oil Spill Coordinator will notify the Bureau of Air Quality Control prior to authorizing planned in situ burns, or as soon as possible in the event of an emergency in situ burn. The State Oil Spill Coordinator will consult with the Bureau of Air Quality Control on all in situ burns unless the delay will hamper the immediate response to an oil spill which may result in long-term damage to the state's natural resources.
5. The Bureau of Air Quality Control will advise the State Oil Spill Coordinator and provide meteorological information and monitoring within their capabilities in the event of an oil spill.
6. The State Oil Spill Coordinator will consider the overall environmental impact of in situ burning on public health and the environment, including air quality and water quality, before making a decision whether or not to burn.
7. Burning must take place immediately or as soon as practical after the State Oil Spill Coordinator gives approval to burn.
8. This Agreement shall terminate upon 30 days written notice by either party.

Dennis L. Keschl 12/31/92
Dennis L. Keschl, Director Date
Bureau of Air Quality Control

David C. Sait 12/31/92
David C. Sait Date
Director, Division of Response Services
Bureau of Haz. Materials & Solid Waste Control

Alan P. Prysunka 12/31/92
Alan P. Prysunka, Director Date
Bureau of Haz. Materials & Solid Waste Control

AUGUSTA
STATE HOUSE STATION 17
AUGUSTA, MAINE 04333-0017
(207) 287-7686 FAX: (207) 287-7826
OFFICE LOCATED AT RAY BUILDING, HOSPITAL STREET

PORTLAND
312 CANCO ROAD
PORTLAND, ME 04103
(207) 879-6300 FAX: (207) 879-6303

BANGOR
106 HOGAN ROAD
BANGOR, ME 04401
(207) 941-4570 FAX: (207) 941-4584

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, ME 04769
(207) 764-0477 FAX: (207) 764-1507

printed on recycled paper



FIGURE 4000-5

Oil Spill Decanting Authorization Form	
The federal and state OSC'S, under authority of _____, hereby approve the use of decanting as a means of expediting the recovery of oil during the following spill cleanup operation:	
Date(s) Approval Effective:	Name of Spill Incident:
Federally Defined Response Area:	
Name of Requester:	
Location and description of Proposed Decanting Operation: (Continue on reverse, if necessary)	
<u>The decanting operation must meet the following conditions:</u> <ol style="list-style-type: none">1. All decanting should be done in a designated "Response Area" within a collection area, vessel collection well, recovery belt, weir area, or directly in front of a recovery system.2. Vessels employing sweep booms with recovery pumps in the apex of the boom shall decant forward of the recovery pumps.3. Vessels not equipped with an oil/water separator should allow retention time for oil held in internal or portable tanks before decanting commences.4. Containment boom must / need not (circle one) be deployed around the collection area to prevent loss of decanted oil entrainment.5. Visual monitoring of the decanting shall be maintained at all times so that discharge of oil in the decanted water is detected promptly.6. Decanting in areas where vacuum trucks, portable tanks, or other collection systems are used for shore cleanup will be subject to the same rules as vessels.7. Additional conditions: (continue on reverse if necessary).	
SIGNATURE- Federal OSC	Date:
SIGNATURE: State OSC	Date:
NOTE: When verbal authorization is given, a copy of this form must be immediately expedited requester (must be a person of authority in the cleanup organization) to ensure the conditions and limitations are clearly understood by all parties.	

Memorandum Of Understanding

Among

U.S. Coast Guard District 1 (USCG)

and

U.S. Environmental Protection Agency Region I (EPA)

and

U.S. Department of the Interior (DOI)

and

U.S. Department of Commerce /

National Oceanic and Atmospheric Administration (DOC/NOAA)

and

State of Maine (ME) Department of Environmental Protection

and

Commonwealth of Massachusetts (MA)

Executive Office of Environmental Affairs

and

State of New Hampshire (NH) Department of Environmental Services

and

State of Rhode Island and Providence Plantations (RI)

Department of Environmental Management

and

State of Vermont (VT) Agency of Natural Resources

PURPOSE

The USCG, EPA, DOI, DOC/NOAA and the States of ME, MA, NH, RI, and VT recognize that the effectiveness of physical removal of spilled oil may be limited by the dynamic nature of the environment in which the oil is spilled. In such circumstances, timely and effective containment, collection, and mechanical removal of the oil may not provide an adequate response. The burning of oil in place as a removal technique (*in-situ* burning), alone or in conjunction with mechanical removal methods and/or chemical countermeasures, may be considered as a means to enhance removal and reduce harm to public health and welfare, or the environment.

This Memorandum of Understanding (memorandum) is designed to implement sections of the National Oil and Hazardous Substances Pollution Contingency Plan (National Contingency Plan) [40 CFR §300.210 (c)(4)(ii)(D) and §300.115 (a)] and the requirements of 33 USC 1321 (j)(4)(B)(ii), the Federal Water Pollution Control Act, as amended by the Oil Pollution Act of 1990. This memorandum provides the primary decision makers in oil spill response (the Federal On-Scene Coordinator (OSC) and the State On-Scene Coordinator (SOSC)) with the authority to use *in-situ* burning in certain zones under the jurisdiction of the Region I Regional Response Team without additional consultation or concurrence. The Responsible Party, another key player in spill response, will also be a part of the decisionmaking process.

Because the jurisdictional boundary between Regions I and II divides Long Island Sound, the State of Connecticut will pursue a separate agreement on the use of this technique. When developed, this agreement will be included in Appendix III, Boundary Area Guidance and Agreements. References to Region I throughout this document apply to all Region I states except Connecticut.

This memorandum constitutes consultation under the National Contingency Plan with DOC/NOAA and DOI for the use of *in-situ* burning as an oil spill removal technique in the “B” Zone and consultation with DOC/NOAA and DOI, and concurrence of the States of ME, MA, NH, and RI in the “A” Zone (both zones defined under Scope below). It is anticipated an ignition source will be sufficient to light oil that is inherently combustible, provided a spill receives timely response action. This memorandum applies to *in-situ* burns that are lit using ignition sources (e.g., small quantities of burning gelled gasoline or kerosene released from a helotorch or a hand-held ignition pack). This memorandum does not apply to *in-situ* burns where the combustibility of the oil must be enhanced using a burning agent (e.g., through the direct addition of a flammable hydrocarbon prior to ignition or the addition of a wicking agent to enhance combustibility). Use of burning agents to enhance the combustibility of oil is subject to the approval requirements described in Subpart J of the National Contingency Plan (§300.910(c)).

This memorandum applies only to response operations within Region I where federal assistance is required. This agreement does not expand or otherwise modify the jurisdiction of any of the signatories to this agreement in matters that are the subject of this agreement.

This memorandum will be incorporated into the Region I Regional Contingency Plan and Area Contingency Plans within Region I.

AUTHORITY

Subpart C of the National Contingency Plan directs the Regional Response Teams to conduct regional planning and coordination of preparedness and response actions in conjunction with Area Committees in the

case of oil discharges. Area Contingency Plans, written by Area Committees, should provide pre-approval of specific countermeasures or removal actions that, if expeditiously applied, will minimize adverse spill-induced impacts to fish and wildlife resources, their habitat, and other sensitive environments. (40 CFR §300.210 (c) (4) (ii) (D)).

Commandant, USCG, has designated the USCG Captains Of The Port (as defined in 33 CFR Part 3) as the OSCs for coastal oil discharges (subject to joint response boundary agreements with EPA), and has delegated to these OSCs the authority and responsibility for compliance with the Federal Water Pollution Control Act and its amendments (33 USC 1221, et seq., as amended).

The U.S. EPA Administrator has designated EPA Regional Administrators as OSCs for inland oil discharges (subject to joint response boundary agreements with USCG), and has delegated to these OSCs the authority and responsibility for compliance with the Federal Water Pollution Control Act and its amendments (33 USC 1221, et seq., as amended). EPA Regional Administrators have further delegated the duties of OSC to members of their Regional staffs.

The DOI and DOC/NOAA are designated federal trustees of certain natural resources under Subpart G of the National Contingency Plan and are to be consulted regarding appropriate removal actions in an oil spill, including the determination to burn oil *in-situ* in United States waters, and must concur with pre-approval plans for the application of specific countermeasures or removal actions (Subpart C of the National Contingency Plan).

In the State of Maine, the State Oil Spill Coordinator from the Department of Environmental Protection has the authority to approve the use of *in-situ* burning for the control of oil spills.

In the Commonwealth of Massachusetts, the Department of Environmental Protection has the authority to approve the use of *in-situ* burning for the control of oil spills.

In the State of New Hampshire, the Commissioner of the Department of Environmental Services has the authority to approve the use of *in-situ* burning for the control of oil spills.

In the State of Rhode Island and Providence Plantations, the Commissioner of the Department of Environmental Management has the authority to approve the use of *in-situ* burning for the control of oil spills.

In the State of Vermont, the Secretary of the Department of Environmental Conservation has the authority to approve the use of *in-situ* burning for the control of oil spills.

SCOPE

This memorandum establishes decision authority for use of *in-situ* burning (absent the use of burning agents) within zones within Region I. The geographic zones and conditions are described below, and a map of the zones is attached as Appendix II.

1) “A” Zones — OSC decision to burn

Geographic Scope:

Zone “A” is defined as all waters subject to the jurisdiction of the United States located seaward of a line measured six miles from the mean low waterline along the coasts and islands of ME, MA, NH, and RI, that are not specifically defined as “Special Consideration Areas” (see paragraph 4 below).

Approval for *in-situ* burning in Zone “A”:

Within Zone “A,” the decision to use *in-situ* burning rests solely with the OSC. No further concurrence or consultation on the part of the OSC is required with EPA, DOC/NOAA, DOI, or the states of ME, MA, NH, and RI (*please refer to Special Consideration Areas that modify the “A” zone*). However, if threatened or endangered species are present in the immediate burn area, the trustee agency for that species must be consulted prior to initiating burning operations.

The OSC will immediately notify EPA, DOC/NOAA, DOI, and the applicable state(s) of a decision to conduct burning within the “A” zone via each agency’s Regional Response Team representative.

2) “B” Zones — Unified Command decision to burn

Geographic Scope:

Zone “B” is defined as all waters subject to the jurisdiction of the United States located seaward of a line measured one mile and terminating six miles from the mean low water line along the coasts and islands of ME, MA, NH, and RI, that are not specifically defined as Special Consideration Areas (see paragraph 4 below).

Approval for *in-situ* burning in Zone “B”:

Within Zone “B,” the decision to use *in-situ* burning rests with the OSC and SOSC(s) within the Unified Command. Cases may arise where a state potentially affected by a smoke plume is not represented in the Unified Command because it may not be affected by the unburned oil. Therefore, the SOSC(s) from the state(s) within 6 miles of the burn source must also concur with the decision to burn (unless a Special Consideration Area has been established to reduce this distance). In Zone “B” no further concurrence or consultation on the part of the OSC is required with EPA, DOC/NOAA, DOI, or other states not within 6 miles of the burn source. If threatened or endangered species are present in the immediate burn area, the trustee agency for that species must be consulted prior to initiating burning operations. The SOSC is responsible for any additional concurrence/consultation requirements that apply at the state level.

The OSC will immediately notify EPA, DOC/NOAA, DOI, and applicable state(s) of a decision to conduct burning within the “B” zone via each agency's Regional Response Team representative.

3) “C” Zones — Unified Command decision to burn following additional consultations/concurrence**Geographic Scope:**

Zone “C” is defined as waters and lands subject to the jurisdiction of the United States and within the geographic responsibility of Regional Response Team I that are shoreward of a line measured 1 mile seaward of the mean low water mark along the coasts and islands of ME, MA, NH, and RI, that are not specifically defined as Special Consideration Areas (see paragraph 4 below).

Approval for *in-situ* burning in Zone “C”:

Within Zone “C,” the decision to use *in-situ* burning rests with the OSC (USCG or EPA) and SOSC(s) within the Unified Command. The OSC must consult with DOC/NOAA and DOI on the appropriateness of *in-situ* burning as a removal action, and gain concurrence of states with land within 6 miles of the burn source (unless this distance has been reduced in a Special Consideration Area). The SOSC is responsible for any additional concurrence/consultation requirements that apply at the state level.

The OSC will immediately notify EPA, DOC/NOAA, DOI, and applicable state(s) of a decision to initiate a burn within the “C” zone via each agency’s Regional Response Team representative.

4) “Special Consideration Areas”

Geographic Scope:

Special Consideration Areas are specific geographic areas where the level of approval/concurrence granted in Zones “A,” “B,” and “C” is modified by the any of the following agencies/entities within their authority, jurisdiction, and areas of responsibility: Area Committees, pre-designated OSCs, DOC/NOAA, DOI, and the states of ME, MA, NH, RI, and VT. These areas will be identified in writing to the Regional Response Team co-chairs and listed in Appendix I. Upon receipt of a Special Consideration Area, the Regional Response Team co-chairs shall solicit comments from signatories to this memorandum with jurisdiction over the area and any areas within 6 miles of the Special Consideration Area. Absent objection, Special Consideration Areas are effective 30 days from their receipt by the Regional Response Team co-chairs.

Approval for *in-situ* burning in Special Consideration Areas

Each defined Special Consideration Area shall contain specific restrictions or permissions that alter pre-approval or pre-consultation otherwise defined by this memorandum in Zones “A,” “B,” or “C”. The restriction placed or authority granted by a Special Consideration Area may be defined to apply only under certain conditions, such as certain wind directions or in certain seasons. Special Consideration Areas shall specify what additional or lesser action, consultation, or concurrence is necessary to proceed with *in-situ* burning in that area. Means of contacting primary or alternate points-of-contact for Special Consideration Areas should be identified for work and non-working hours.

5) Boundary Areas - Region I Boundary

In areas where burning will have an impact across a Region I border into Canada or Region II (e.g., within 6 miles of the border), the concurrence of the applicable parties on the opposite side of the border must be obtained prior to use of *in-situ* burning. Specific cross-border guidance documents and agreements regarding near-border *in-situ* burning, when developed, will be included in Appendix III.

PROTOCOLS

The signatories to this memorandum agree that the decision to use *in-situ* burning lies with either the OSC or the OSC and the SOSC, based on the location of the burn as detailed in Scope. The SOSC is responsible for any additional concurrence/consultation requirements that apply at the state level. The decision to use *in-situ* burning should be made with guidance from the Region I *In-situ* Burning Policy (Information Section) and applicable Area Contingency Plans and is subject to the following conditions:

1. The OSC may authorize the use of *in-situ* burning on a discharge of oil to prevent or substantially reduce the hazard to human life without obtaining concurrence from EPA, DOI, DOC/NOAA, or the affected

states, without following protocols established in this memorandum, and without following the guidelines in the Regional Contingency Plan and Area Contingency Plan. If *in-situ* burning is used in this manner, notification of EPA, USCG, DOC/NOAA, DOI and the affected state(s) via Regional Response Team representatives shall be made as soon as practicable. Once the risk to human life has subsided, this exception no longer applies.

2. The decision to use *in-situ* burning shall rest solely with the pre-designated OSC or jointly with the SOSOC in certain zones as described under the Scope of this memorandum. This responsibility of the OSC may not be delegated.

3. If a decision has been made to use *in-situ* burning under the provisions of this memorandum, the OSC will immediately notify EPA, DOI, DOC/NOAA and the applicable state(s) of that decision via Regional Response Team representatives. This initial notification should include, but is not limited to, the following information to the extent available:

Type and amount of oil discharged

Area affected

The projected area of impact of the oil if not burned

Reasons why *in-situ* burning has been selected as a mitigation technique

On-scene weather

4. *In-situ* burning will be conducted by trained professionals using recognized techniques and technology. Burning will be conducted in a way that allows for safe and effective control of the burn to the maximum extent feasible, including the ability to stop the burn if necessary. Containment and control using fire-resistant boom is recognized as the preferred method of *in-situ* burning in open-water situations. In this situation, all practical efforts to limit the potential for igniting the source or adjacent, uncontained, or uncontrollable slicks will be made.

5. *In-situ* burning is advised only when the meteorological and sea conditions are operationally favorable for a successful burn. The OSC will give due consideration to the direction of the wind and the possibility of the wind blowing the smoke plume over population centers or sensitive resources onshore.

6. Health and Safety Concerns

(a) OPERATORS: Worker health and safety is of paramount concern. Each employer and OSC must comply with all applicable Occupational Health and Safety Administration regulations. Prior to any *in-situ* burn operations, a site safety plan must be prepared.

(b) GENERAL PUBLIC: Burning should be stopped if it becomes an unacceptable health risk to the general public. If at any time during burning operations exposure limits are observed to exceed National Ambient Air Quality Standards in nearby populated areas as a result of the burn, the OSC shall modify or suspend the burn operation as appropriate. Additionally, the OSC and the Unified Command should consider the potential effects of short term exposure of the public to high levels of particulates which may still meet National Ambient Air Quality Standards. Specifically, the OSC should consider the current short term *in-situ* burning exposure guideline recommended by the National Response Team (at the time of signature, the NRT guideline for short term particulate exposure from *in-situ* burning is 150 $\mu\text{g}/\text{m}^3$ of particulates less than 10 μm diameter (PM-10) averaged over one hour; the current National Ambient Air Quality Standard for particulates is the same concentration averaged over 24 hours. The NRT guideline will be revised when more stringent particulate standards are adopted). OSCs in Region I shall factor this guideline on public exposure to *in-situ* burn emissions into burn initiation and continuation decisions. Public notification is advisable prior to initiating a burn.

7. The OSC shall ensure *in-situ* burning is conducted in accordance with any biological opinions rendered under Section 7 of the Endangered Species Act. Seasonal, spacial, or other similar restrictions identified in biological opinions shall be listed as Special Consideration Areas and placed in Appendix I. If threatened or endangered species are present in the immediate burn area, the trustee agency for that species must be consulted prior to initiating burning operations.

8. The OSC will make every reasonable effort to continuously evaluate the decision to burn, and allow Regional Response Team agencies and affected states the opportunity for comment. The OSC shall provide a mechanism to receive information from authorized representatives of the following entities that may necessitate termination of an *in-situ* burn: EPA, affected states, natural resource trustee agencies, and cognizant health agencies. Any verbal recommendations to terminate an *in-situ* burn must be followed up immediately in writing.

9. Representatives of the OSC shall monitor *in-situ* burning operations. The trustee agencies, the affected states, the Occupational Safety and Health Administration, and the responsible party may monitor *in-situ* burning operations, when feasible.

(a) Monitoring to establish “continue / modify / discontinue” information for input to the OSC shall accompany a burn. Visual monitoring may be sufficient provided the smoke plume is not predicted to affect human populations or highly sensitive areas. If smoke plumes are predicted to or may cross over populated areas, real-time PM-10 monitoring (a protocol is identified in Regional Response Team I *In-situ* Burning

Policy — Information Section) is advisable and, when practicable, should be in place prior to the start of burn operations to gather baseline data.

(b) All burns must incorporate observations (typically visual) to monitor smoke plume behavior. A trial burn may be conducted to better estimate plume behavior prior to operational burning. Conditions under which the burn should be stopped, such as a threat of plume contact with the ground in populated or environmentally sensitive areas, shall be clearly identified to the maximum extent practicable to those conducting burn operations prior to starting the burn.

12. Mechanical recovery equipment shall be mobilized on-scene when feasible for backup and complimentary response capability. Provisions should be made for collection of burn residue following the burn(s).

13. If *in-situ* burning is used, a post incident debriefing will take place within 45 days to gather information concerning its effectiveness and to determine whether any changes to this memorandum are necessary. The debriefing will be chaired by the OSC, who will also arrange the time, place, and date of the debrief.

AMENDMENTS

This Memorandum of Understanding may be amended in writing in whole or in part as is mutually agreeable to all signatories.

Special Consideration Areas submitted to the Regional Response Team as outlined in paragraph 4 of the **Scope** of this memorandum will be promptly distributed to signatories and included in Appendix I.

CANCELLATION

Each signatory to this Memorandum of Understanding may withdraw their agreement to the memorandum in whole or in part by submitting a letter of withdrawal to the Regional Response Team co-chairs; withdrawal from this memorandum will take effect no earlier than 30 days after receipt of this letter. The Regional Response Team co-chairs shall promptly notify other document signatories. Withdrawal by signatories shall not have any effect on this agreement with respect to remaining signatories.

SIGNATURES

/s/	May 19, 1998
_____ Captain Thomas M. Daley First Coast Guard District (m) Acting Regional Response Team Co-Chair	_____ Date
/s/	May 19, 1998
_____ Ms. Dennisses Valdés US EPA Region I Regional Response Team Co-Chair	_____ Date
/s/	May 19, 1998
_____ Commander Burton Russell, USCG Captain of the Port Portland Federal On-Scene Coordinator	_____ Date
/s/	May 20, 1998
_____ Captain John Grenier, USCG Captain of the Port Boston Federal On-Scene Coordinator	_____ Date
/s/	May 19, 1998
_____ Captain Peter A. Popko, USCG Captain of the Port Providence Federal On-Scene Coordinator	_____ Date
/s/	Jan 26, 1999
_____ Mr. Andrew Raddant Regional Environmental Officer / Northeast U.S. Department of Interior Regional Response Team Representative	_____ Date

/s/	May 19, 1998
_____ Commander Gerald Wheaton NOAA/Hazmat U.S. Department of Commerce Regional Response Team Representative	_____ Date

/s/	May 19, 1998
_____ Mr. David C. Sait State of Maine State Oil Spill Coordinator	_____ Date

/s/	Oct 6, 1998
_____ Ms. Trudy Cox Commonwealth of Massachusetts Secretary of Environmental Affairs	_____ Date

/s/	Jan 25, 1999
_____ Mr. Robert W. Varney State of New Hampshire Commissioner, Department of Environmental Services	_____ Date

/s/	July 9, 1998
_____ Mr. Andrew H. McLeod State of Rhode Island and Providence Plantations Director, Department of Environmental Management	_____ Date

**	
_____ Ms. Barbara Ripley State of Vermont Secretary, Agency of Natural Resources	_____ Date

***: Pending as of 1/26/99. If approval will be protracted, VT will send a letter to co-chairs stating that they have no objection to use of MOU in areas that do not affect Vermont.

Appendix I: Special Consideration Areas

State of Maine Special Consideration Area

Year-round

The OSC shall gain concurrence of the Maine State On-Scene Coordinator for *in-situ* burns within 12 miles of the Maine coast.

20 foot water depth Special Consideration Area

Year-round

The OSC must consult with DOI and NOAA Regional Response Team representatives when using *in-situ* burning in waters where the depth is less than 20 feet at mean low water. (Such consultation is already required in Zone C, which is inside 1 mile, so this only applies to any areas that may be less than 20 feet deep that are beyond 1 mile from shore.)

National Marine Fisheries Service Special Consideration Area Summary

Details of boundaries and conditions detailed in NMFS Northeast Section 7 consultation letter to First Coast Guard District dated November 18, 1997.

Case-by-case consultation with NMFS Northeast Region required for *in-situ* burning in:

Jeffreys Ledge

April 1—September 30

Great South Channel

April 1—June 30, October 1—November 15

Cape Cod Bay

February 1—May 15

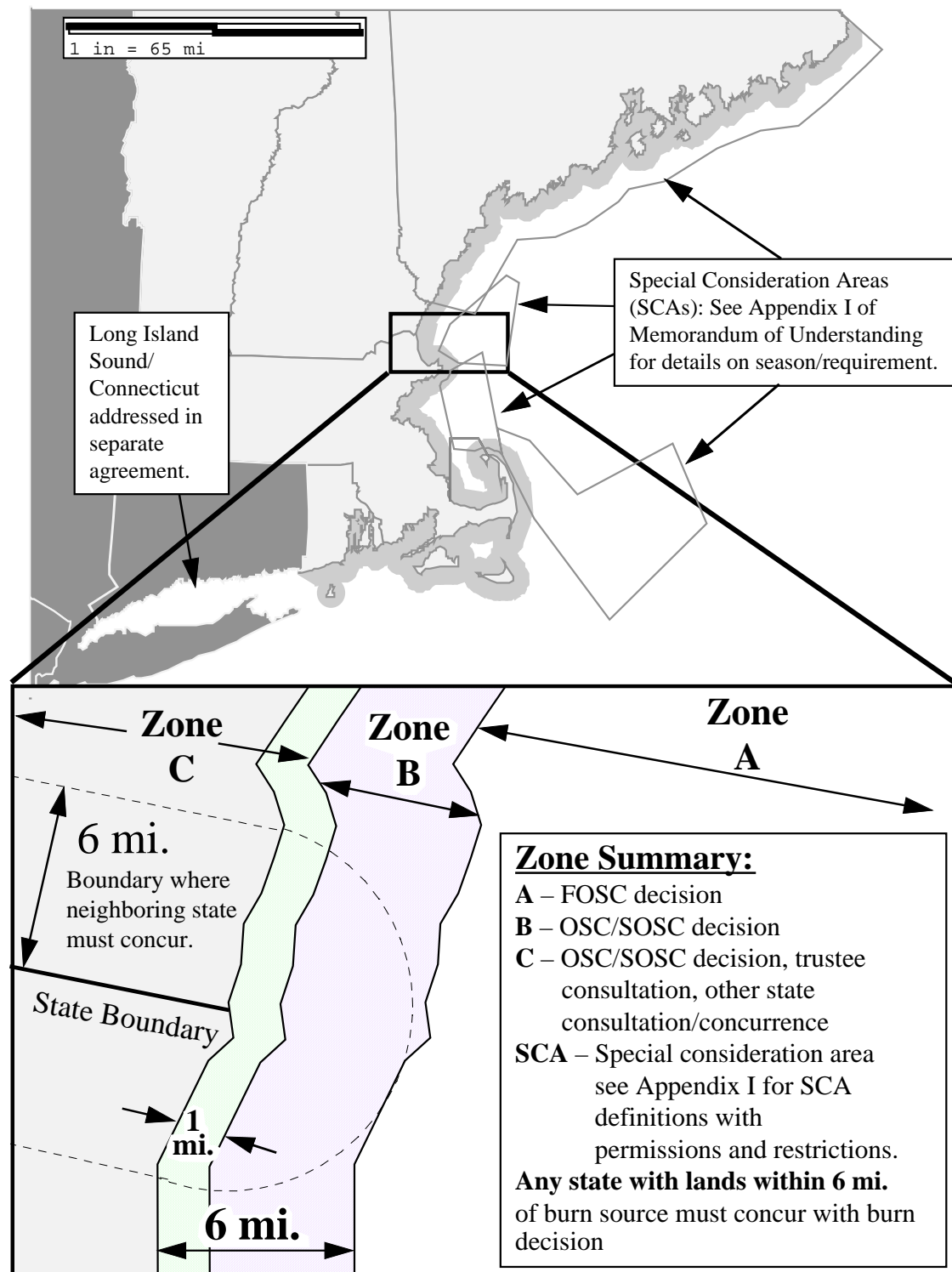
National Ocean Service Special Consideration Area

Case-by-case consultation with sanctuary manager required for *in-situ* burning in:

Stellwagen Bank National Marine Sanctuary

Year-round

Appendix II: Zone Boundary map and diagram



Appendix III: Boundary Area Guidance and Agreements

Boundary agreements or guidance developed (i.e. with Canadians, for Region II, Long Island Sound, etc.) may be attached here.